SIEMENS

Data sheet

3RT2017-1MB42-0KT0



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, 0.85-1.85* Us, auxiliary contacts: 1 NC, screw terminal, size: S00, not expandable with auxiliary switch

product brand name	SIRIUS
product designation	Coupling contactor
product type designation	3RT2
General technical data	
size of contactor	\$00
product extension	
function module for communication	No
auxiliary switch	No
power loss [W] for rated value of the current	
at AC in hot operating state	1.5 W
at AC in hot operating state per pole	0.5 W
without load current share typical	1.6 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at DC	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at DC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	30 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	690 V

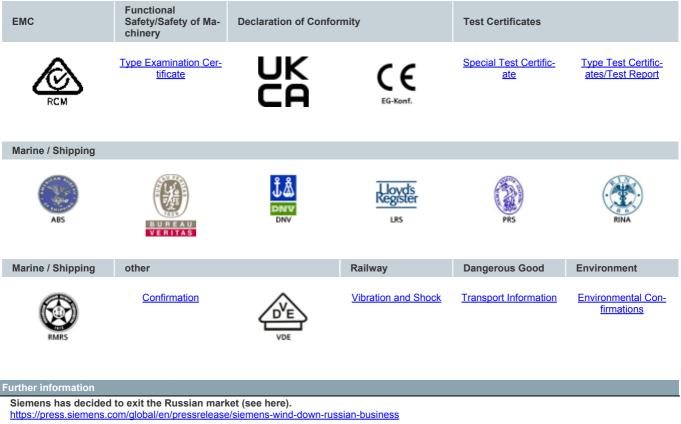
 at AC-3e rated value maximum 	690 V
operational current	030 V
at AC-1 at 400 V at ambient temperature 40 °C rated	22 A
value	22 7
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated	22 A
value	
 — up to 690 V at ambient temperature 60 °C rated value 	20 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
at AC-4 at 400 V rated value	8.5 A
at AC-5a up to 690 V rated value	19.4 A
• at AC-5b up to 400 V rated value	9.9 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated	4 mm ²
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 400 V rated value at 690 V rated value	3.3 A
operational current	5.5 A
• at 1 current path at DC-1	
- at 24 V rated value	20 A
— at 60 V rated value	20 A 20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
	0.6 A
 — at 600 V rated value with 2 current paths in series at DC-1 	0.0 A
- at 24 V rated value	20 A
— at 60 V rated value	20 A 20 A
— at 10 V rated value — at 110 V rated value	20 A 12 A
— at 220 V rated value	12 A 1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
with 3 current paths in series at DC-1	
with 3 current paths in series at DC-1 — at 24 V rated value	20 A
— at 60 V rated value	20 A 20 A
— at 100 V rated value — at 110 V rated value	20 A 20 A
— at 220 V rated value	20 A 20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
at 1 current path at DC-3 at DC-5 at 24 V rated value	20.4
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A

• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	0.35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
• at AC-3	2 1444
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
• at AC-3e	2 1/11/
— at 230 V rated value	3 kW 5.5 kW
— at 400 V rated value	
— at 500 V rated value	5.5 kW 5.5 kW
— at 690 V rated value	0.0 KVV
operating power for approx. 200000 operating cycles at AC- 4	
• at 400 V rated value	2 kW
• at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	2.8 kVA
 up to 400 V for current peak value n=20 rated value 	4.9 kVA
 up to 500 V for current peak value n=20 rated value 	6.2 kVA
 up to 690 V for current peak value n=20 rated value 	8 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	1.9 kVA
 up to 400 V for current peak value n=30 rated value 	3.3 kVA
 up to 500 V for current peak value n=30 rated value 	4.1 kVA
 up to 690 V for current peak value n=30 rated value 	5.7 kVA
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 5 s switching at zero current maximum	123 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 10 s switching at zero current maximum	96 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 30 s switching at zero current maximum	74 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	61 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	10 000 1/b
• at DC	10 000 1/h
 operating frequency at AC-1 maximum 	1 000 1/h
• at AC-1 maximum • at AC-2 maximum	750 1/h
• at AC-2 maximum • at AC-3 maximum	750 1/h
at AC-3 maximum at AC-3e maximum	750 1/h
• at AC-3e maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated value of magnet coil at DC	24 0
initial value	0.85
• full-scale value	1.85
closing power of magnet coil at DC	1.6 W
holding power of magnet coil at DC	1.6 W
closing delay	

• In C. 25 120 ms • eit DC 620 ms • eit DC 520 ms • entrop time 105 ms • Control Version of the switch operating mechanism Sandard A1 - A2 • Availage decontrop 1 • eit DC 10.A • eit DC viade value 10.A • eit DC viade value 10.A • eit DC viade value 0.A • eit DC viade value 10.A • eit DC viade value 10.A <th></th> <th></th>		
• i OC 520 ms caring time 1015 ms contract varian of the avitch operating mechanism Standard A1 - A2 Analasy Actants Image of the avitch operating mechanism operational current at AC - 15 Image of the avitch operating mechanism operational current at AC - 15 Image of the avitch operating mechanism • # 200 V rade Value 0 A • # 600 V rade Value 0 A		25 120 ms
arcing time 10. 15 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary durated 1 control version of AC contacts for auxiliary contacts instantaneous 1 operational current at AC-15 0 e 1200 V rated value 3 A e 1600 V rated value 3 A e 1600 V rated value 6 A e 110 V rated value 0 A e 120		
control Standard A1 - A2 Auxiliary circuit Immedia of X contacts for auxiliary contacts instantaneous 1 contact Operational current at AC-12 maximum 10 A operational current at AC-12 ID A • at 200 Vrated value 10 A	• at DC	5 20 ms
AuxIlary circuit 1 contract 1 operational current at AC-12 runsum 10.A et al 00 Visted value 2.A et al 00 Visted value 0.A operational current at AC-12 runsum 0.A et al 04 visted value 0.15 A operational current at DC-13 0.15 A et al 04 visted value 0.15 A operational current at 0C-13 0.14 A et al 05 visted value 0.15 A operational current at 0C-13 0.14 A et al 05 visted value 0.14 A et al 05 visted value 0.14 A et al 05 visted value 0.14 A et al 00 visted value 1.4 A	arcing time	10 15 ms
number of NC contacts for availably contacts instantaneous contact 1 operational current at AC-15 0.A ext 230 V rated value 10.A ext 230 V rated value 0.A ext 240 V rated value 0.A ext 250 V rated value 0.A ext 220 V rated value 2.A ext 220 V rated value 0.A ext 220 V rated value 0.A ext 200 V rated value 0.A		Standard A1 - A2
contact 0 operational current at AC-12 maximum 0 operational current at AC-15 0 • at 30 V trated value 3 • at 30 V trated value 2 • at 30 V trated value 1 • at 30 V trated value 1 • at 30 V trated value 0 • at 30 V trated value 0 • at 40 V trated value 0 • at 40 V trated value 0 • at 40 V trated value 0 • at 60 V rated value 0.15 A • at 60 V rated value 0.15 A • at 60 V rated value 0.3 A • at 60 V rated value 0.1 A • at 60 V rated value 0.1 A • at 60 V rated value 0.5 hp • at 60 V rated value 0.5 hp • at 60 V rated value 0.5 hp • at 400 V rated value 0.5 hp • at 400 V rated value	Auxiliary circuit	
operational current at AC-15 • at 230 V rated value 10 A • at 300 V rated value 2 A • at 800 V rated value 1 A operational current at DC-12		1
 at 230 V rined value at 600 V rined value A at 600 V rined value A at 600 V rined value A	operational current at AC-12 maximum	10 A
• alt 400 Y rated value3 A• at 600 Y rated value1 Aoperational current at DC-12IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	operational current at AC-15	
• at 500 V rated value 2 A • at 600 V rated value 1A • operational current at DC-12 0 • at 64 V rated value 0 A • at 70 V rated value 0 A • at 80 V rated value 1 A • at 80 V r	• at 230 V rated value	10 A
• at 680 V rated value1 Aoperational current at DC-12	• at 400 V rated value	3 A
operational current at DC-12 10 A • at 24 V rated value 10 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 125 V rated value 2 A • at 125 V rated value 1 A • at 200 V rated value 0.15 A operational current at DC-13	• at 500 V rated value	2 A
• at 24 V rated value 10 Å • at 48 V rated value 6 Å • at 10 V rated value 6 Å • at 110 V rated value 3 Å • at 220 V rated value 1 Å • at 220 V rated value 0.15 Å • at 240 V rated value 0.15 Å • at 240 V rated value 0.15 Å • at 240 V rated value 2 Å • at 240 V rated value 0.15 Å • at 240 V rated value 0.16 Å • at 400 V rated value 2 Å • at 100 V rated value 0.3 Å • at 200 V rated value 0.1 Å • at 200 V rated value 0.1 Å • at 200 V rated value 11 Å • at 300 V rated value 11 Å • at 400 V rated value 11 Å • at 400 V rated value 12 Å • at 400 V rated value 12 Å • at 400 V rated value 13 Å • at 400 V rated value 14 Å • at 400 V rated value 10 Å • at 400 V rated v	• at 690 V rated value	1 A
• at 48 V rated value 6 A • at 60 V rated value 6 A • at 128 V rated value 2 A • at 228 V rated value 0.15 A oppartional current at DC-13	•	
• at 60 V rated value 6 A • at 110 V rated value 3 A • at 220 V rated value 1 A • at 200 V rated value 0.15 A operational current at DC-13 1 • at 24 V rated value 10 A • at 400 V rated value 2 A • at 40 V rated value 2 A • at 60 V rated value 2 A • at 10 V rated value 0.3 A • at 220 V rated value 0.3 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A • at 600 V rated value 0.1 A • at 600 V rated value 11 A • at 600 V rated value 2 hp • of or single-phase AC motor - - at 200/CR0 V rated value 3 hp - at 200/C	• at 24 V rated value	
• at 110 V rated value 3 A • at 125 V rated value 2 A • at 260 V rated value 0.15 A operational current at DC-13 • • at 600 V rated value 0.15 A operational current at DC-13 • • at 40 V rated value 0.1 A • at 42 V rated value 2 A • at 60 V rated value 2 A • at 60 V rated value 0.1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.1 A • at 600 V rated value 0.1 A • at 600 V rated value 0.1 A • ot 600 V rated value 0.1 A • ot 600 V rated value 11 A • at 800 V rated value 11 A • ot 800 V rated value 12 b • ot 800 V rated value 13 b • ot 800 V rated value 3 hp • ot 800 V rated va	• at 48 V rated value	6 A
• at 125 V rated value 2 A • at 220 V rated value 0.15 A operational current at DC-13 0 • at 24 V rated value 10 A • at 80 V rated value 2 A • at 80 V rated value 2 A • at 80 V rated value 2 A • at 80 V rated value 0.9 A • at 125 V rated value 0.9 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings 11 A • at 600 V rated value 0.5 hp • at 600 V rated value 11 A • at 600 V rated value 11 A • at 600 V rated value 11 A • at 600 V rated value 10 A • at 600 V rated value 11 A • at 600 V rated value 11 A • at 600 V rated value 10 A • at 600 V rated value 10 A • at 200 V rated value 11 A • at 600 V rated value 10 A • at 600 V rated value 10 A • at 600 V rated value 10 A • at 600 V rated value 11 A • at 600 V rated value 10 A • at 600 V rated value 10 A • at 600 V rated value 10 A <td>• at 60 V rated value</td> <td>6 A</td>	• at 60 V rated value	6 A
• at 220 V rated value 0.15 A operational current at DC-13 0.15 A • at 24 V rated value 10 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 100 V rated value 2 A • at 100 V rated value 0.9 A • at 25 V rated value 0.9 A • at 200 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratinge 11 A full-dad current (FLA) for 3-phase AC motor 1 faulty switching per 100 million (17 V, 1 mA) • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratinge 11 A full-dad current (FLA) for 3-phase AC motor - at 480 V rated value - at 10/120 V rated value 0.5 hp - at 200/208 V rated value 3 hp - at 575/600 V rated value 7.5 hp		
• at 600 V rated value 0.15 Å operational current at DC-13 10 Å • at 24 V rated value 2 Å • at 60 V rated value 2 Å • at 60 V rated value 2 Å • at 61 V rated value 0.9 Å • at 125 V rated value 0.9 Å • at 220 V rated value 0.1 Å • at 220 V rated value 0.1 Å • at 600 V rated value 11 Å • at 600 V rated value 0.5 hp - at 200 Vrated value 2 hp • for single-phase AC motor - - at 200/208 V rated value 3 hp - at 640480 V rated value 7.5 hp - at 640480 V rated value 7.6 hp - at 675600 V rated value 3 hp		
operational current at DC-13 10 A • at 42 V rated value 10 A • at 44 V rated value 2 A • at 60 V rated value 2 A • at 100 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A • at 600 V rated value 0.1 A • at 600 V rated value 0.1 A • contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 11 A full-load current (FLA) for 3-phase AC motor 11 A • at 400 V rated value 11 A • at 600 V rated value 11 A • is 400 V rated value 11 A • is 400 V rated value 11 A • at 200 V rated value 11 A • at 200 V rated value 3 hp		
• at 24 V rated value 10 Å • at 46 V rated value 2 Å • at 60 V rated value 2 Å • at 110 V rated value 1 Å • at 125 V rated value 0.9 Å • at 20 V rated value 0.3 Å • at 200 V rated value 0.1 Å contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mÅ) UL/CSA ratings 11 Å * at 800 V rated value 11 Å • at 800 V rated value 2 hp • for single-phase AC motor - - at 200/208 V rated value 2 hp • for 3-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 7.5 hp - at 80/408 V rated value 7.5 hp <t< th=""><td></td><td>0.15 A</td></t<>		0.15 A
• at 48 V rated value 2 A • at 100 V rated value 2 A • at 110 V rated value 0.9 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings 11 A val 600 V rated value 11 A • at 200 V rated value 0.5 hp - at 200 V rated value 3 hp - at 200/208 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / C600 Short-circuit protection of the main circuit - with type of coordination 1 required -	-	
• at 60 V rated value2 A• at 110 V rated value1 A• at 220 V rated value0.9 A• at 220 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value11 A• at 600 V rated value11 Ayielded mechanical performance (hp)• for single-phase AC motor- at 101/120 V rated value0.5 hp- at 230 V rated value0.5 hp- at 230 V rated value3 hp- at 200/208 V rated value3 hp- at 200/208 V rated value3 hp- at 200/208 V rated value7.5 hp- at 200/208 V rated value10 hpcontact rating of auxiliary contacts according to ULA600 / 0600Short-circuit protectiongG: 50A (690V, 100KA), aM: 20A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 20A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 20A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA), aM: 16A (690V, 100KA), BS88: 35A (415V, 80KA)gG: 50A (690V, 100KA),		
• at 110 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 800 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 1 full-load current (FLA) for 3-phase AC motor • • at 800 V rated value 11 A • at 600 V rated value 11 A • at 300 V rated value 0.5 hp • at 110/120 V rated value 0.5 hp • at 200/200 V rated value 3 hp - at 200/200 V rated value 7.5 hp - at 200/200 V rated value 7.5 hp - at 575/600 V rated value 7.5 hp - at 575/600 V rated value 7.5 hp - at 575/600 V rated value 7.5 hp - with type of coordination 1 required 9G: 50A (690V,100kA), aM: 20A (690V,100kA), BS8: 35A (415V,80kA) - with type of coordination 1 required 9G: 50A (690V,100kA), aM: 16A (690V,100kA), BS8: 35A (415V,80kA) • for short-circuit protection of the main		
• at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 11 A full-bade current (FLA) for 3-phase AC motor 11 A • at 800 V rated value 11 A • at 800 V rated value 11 A • jeided mechanical performance (hp) • • for single-phase AC motor 0.5 hp - at 200 V rated value 0.5 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection of the main circuit - - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (600 V, 100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) • or short-circuit protection of the auxiliary switch required gG: 10 A (600 V, 100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) • or short-circuit protection of the auxiliary switch required gG: 10 A (600 V, 100kA), aM: 16A (690V,100kA), BS88: 35A (415V,80kA) • or short-circuit		
• at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 11 A full-load current (FLA) for 3-phase AC motor 11 A • at 600 V rated value 11 A yielded mechanical performance [hp] 11 A • for single-phase AC motor 0.5 hp - at 100/120 V rated value 2 hp • for 3-phase AC motor 2 hp - at 2002 V rated value 3 hp - at 200208 V rated value 3 hp - at 200208 V rated value 3 hp - at 200208 V rated value 3 hp - at 30 Vrated value 3 hp - at 30 Vrated value 3 hp - at 460480 V rated value 7.5 hp - at 450600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection of the main circuit - with type of assignment 2 required - with type of assignment 2 required gG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) i for short-circuit protection of the		
• at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings		
contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor 11 A • at 480 V rated value 11 A • at 480 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor - at 100/120 V rated value 2 hp • for 3-phase AC motor 2 hp - at 200 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 7.5 hp - at 200/208 V rated value 7.5 hp - at 57/600 V rated value 7.5 hp - with type of coordination 1 required gG: 50A (690V,100kA), aM: 50A (690V,100kA), BS88: 35A (415V,80kA) gG: 50A (690V,100kA), aM: 16A (690V, 100kA), BS88: 35A (415V,80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting dimensions +/180° rotation possible on vertical mounting surface: can be tilted forward and backward by +/- 22.5° on vertical mounting surface: can be tilted forward and backward by +/- 22.6° on vertical mounting surface: can be tilted forward and backward by +/- 22.6° on vertical mounting surface: can be tilted forwar		
UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor - at 10/120 V rated value - at 200 V rated value • for 3-phase AC motor - at 200/208 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 575/600 V rated value - with type of coordination 1 required - with type of coordination 1 required - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required - statallation/ mounting/ dimensions mounting position +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertica		
full-load current (FLA) for 3-phase AC motor 11 A • at 480 V rated value 11 A • at 600 V rated value 11 A yielded mechanical performance [hp] 11 A • for single-phase AC motor 0.5 hp - at 110/120 V rated value 2 hp • for 3-phase AC motor 3 hp - at 200/208 V rated value 3 hp - at 450/480 V rated value 7.5 hp - at 450/480 V rated value 7.5 hp - at 4575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Shortircuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required gG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting virface Installation/ mounting virface screw and snap-on mounting surface; can be tilted forward and backward by 1-22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mountin		
• at 480 V rated value 11 A • at 600 V rated value 11 A yielded mechanical performance [hp] 11 A • for single-phase AC motor 0.5 hp - at 10/120 V rated value 2 hp • for 3-phase AC motor 3 hp - at 200/208 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 10 A (500 V, 100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 10 A (500 V, 1 kA) Installation/ mounting tree required backward by +/- 22.5' on vertical mounting surface; can be tilted forward and backward by +/- 22.5' on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail according to DIN		
• at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for 3-phase AC motor - at 200/208 V rated value - at 200/208 V rated value 3 hp - at 200/208 V rated value 10 hp - at 460/480 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection 460/480 V rated value design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 10 A (500 V, 10kA), aM: 20A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting unfaces according to DIN EN 60715 height 58 mm 4/-180* or tetical mounting surface height 58 mm 58 mm width 45 mm 45 mm depth 73 mm 73 mm		11 A
yielded mechanical performance [hp] for single-phase AC motor at 1101/120 V rated value bit p at 230 V rated value bit p at 200/208 V rated value c) 5 hp at 200/208 V rated value at 220/230 V rated value bit p at 220/230 V rated value bit p at 220/230 V rated value bit p at 460/480 V rated value contact rating of auxiliary contacts according to UL A800 / Q600 Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 20A (690V,100kA), BS88: 20A (415V,80kA) of or short-circuit protection of the main circuit with type of coordination 1 required gG: 20A (690V,100kA), aM: 20A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 20A (690V,100kA), BS88: 20A (415V,80kA) of or short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 tkA) Installation/ mounting/ dimensions mounting position the auxiliary switch required screw and snap-on mounting surface: can be tilted forward and backward by t/- 22.5° on vertical mounting surface side-by-side mounting Yes height depth 73 mm required spacing 		
• for single-phase AC motor0.5 hp- at 110/120 V rated value0.5 hp- at 230 V rated value2 hp• for 3-phase AC motor3 hp- at 220/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value7.5 hp- at 6575/600 V rated value10 hpcontact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectiongG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)- with type of coordination 1 requiredgG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)- with type of assignment 2 requiredgG: 10 A (500 V, 10kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)- with type of coordination 1 requiredgG: 10 A (500 V, 10kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)- with type of coordination 1 requiredgG: 10 A (500 V, 10kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)- with type of assignment 2 requiredgG: 10 A (500 V, 1 kA)Installation/ mounting/ dimensions+/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surfacefastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715• side-by-side mountingYesheight58 mmwidth45 mmdepth73 mmrequired spacingYa m		
- at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for 3-phase AC motor - - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection 4600 / Q600 Short-circuit protection of the main circuit - with type of coordination 1 required - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 10 A (500 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) - with type of coordination 1 required gG: 10 A (500 V, 1 kA) of or short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation mounting dimensions +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height S6 mm		
- at 230 V rated value 2 hp • for 3-phase AC motor - - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 3 hp - at 460/480 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection A600 / Q600 design of the fuse link • • for short-circuit protection of the main circuit - - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 35A (415V,80kA) - for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting / dimensions +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm		0.5 hp
• for 3-phase AC motorImage: Section of the section of t	— at 230 V rated value	2 hp
at 220/230 V rated value3 hp at 460/480 V rated value7.5 hp at 575/600 V rated value10 hpcontact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectiondesign of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required • for short-circuit protection of the main circuit 	 for 3-phase AC motor 	
	— at 200/208 V rated value	3 hp
— at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection	— at 220/230 V rated value	
contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm required spacing	— at 460/480 V rated value	7.5 hp
Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required e for short-circuit protection of the auxiliary switch required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) e for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm	— at 575/600 V rated value	10 hp
design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 	contact rating of auxiliary contacts according to UL	A600 / Q600
 for short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm 	Short-circuit protection	
with type of coordination 1 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)• for short-circuit protection of the auxiliary switch requiredgG: 10 A (500 V, 1 kA)Installation/ mounting/ dimensionsgG: 10 A (500 V, 1 kA)mounting position+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surfacefastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715• side-by-side mountingYesheight58 mmwidth45 mmdepth73 mm	design of the fuse link	
with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)• for short-circuit protection of the auxiliary switch requiredgG: 10 A (500 V, 1 kA)Installation/ mounting/ dimensions+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surfacefastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715• side-by-side mountingYesheight58 mmwidth45 mmdepth73 mm	 for short-circuit protection of the main circuit 	
• for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions	- with type of coordination 1 required	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm	 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm	for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm required spacing Image: State of the state	Installation/ mounting/ dimensions	
• side-by-side mounting Yes height 58 mm width 45 mm depth 73 mm required spacing	mounting position	
height 58 mm width 45 mm depth 73 mm required spacing 73 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
width 45 mm depth 73 mm required spacing 73 mm	 side-by-side mounting 	Yes
depth 73 mm required spacing 73 mm	height	58 mm
required spacing	width	45 mm
	depth	73 mm
with side-by-side mounting	required spacing	
	with side-by-side mounting	

	10
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	10 mm
	10 mm
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
onnections/ Terminals	
type of electrical connection	
 for main current circuit 	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), 2x 4 mm ²
solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm ²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), 2x 4 mm ²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross	
section	
for main contacts	20 12
 for auxiliary contacts 	20 12
afety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
Ū.	40 %
with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
euitability for uso	
suitability for use	Vac
safety-related switching OFF	Yes
-	Yes
safety-related switching OFF	Yes
safety-related switching OFF sertificates/ approvals	Yes
safety-related switching OFF sertificates/ approvals	
safety-related switching OFF ertificates/ approvals General Product Approval	
safety-related switching OFF ertificates/ approvals General Product Approval	

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Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1MB42-0KT0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1MB42-0KT0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1MB42-0KT0

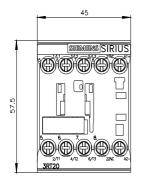
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

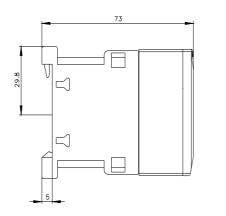
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1MB42-0KT0&lang=en

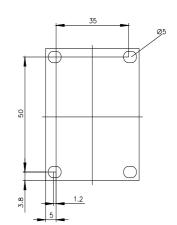
Characteristic: Tripping characteristics, I2t, Let-through current

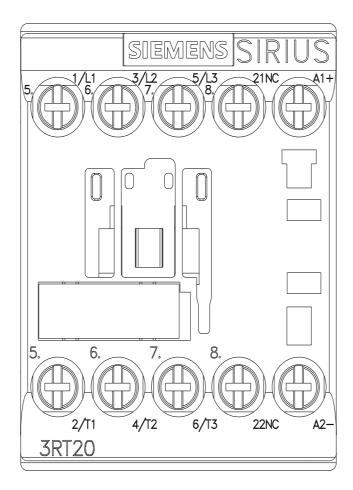
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1MB42-0KT0/char

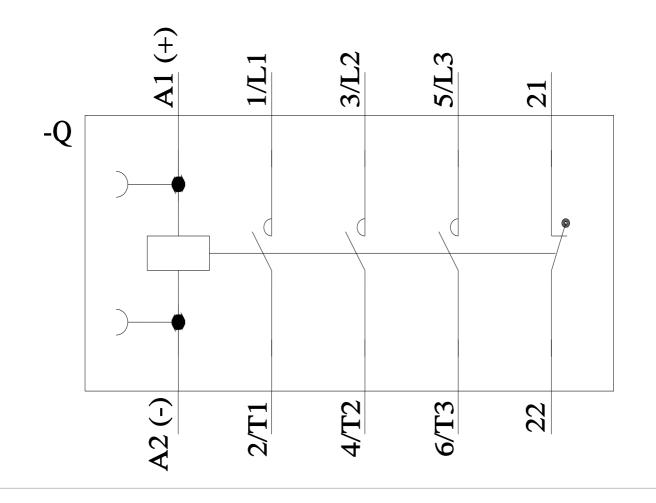
Further characteristics (e.g. electrical endurance, switching frequency)











last modified:

2/10/2023 🖸